

**NOT FOR CITATION**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIAATS AUTOMATION TOOLING SYST.,  
INC., et al.,

Plaintiffs,

No. C 03-2648 PJH

v.

FOXCONN ELECTRONICS, INC., et al.,

Defendants.

**ORDER RE MOTIONS FOR SUMMARY  
JUDGMENT AND SUPPLEMENTAL  
CLAIM CONSTRUCTION**

The parties' various motions for summary judgment came on for hearing on April 20, 2005 before this court. Plaintiffs appeared through their counsel John Regan, and defendants appeared through its counsel, Peter Wied. The parties also submitted post-hearing briefing.<sup>1</sup> Having read all submitted papers and carefully considered the relevant legal authority, the court DENIES plaintiffs' motion for summary judgment on infringement, GRANTS plaintiff's motion for summary judgment on affirmative defenses as unopposed, and GRANTS IN PART and DENIES IN PART defendants' motion for summary judgment.<sup>2</sup>

**BACKGROUND**

Plaintiffs ATS and Thermal Form and Function are, respectively, the exclusive licensee and assignee of U.S. Patent No. 5,494,098 ("the '098 patent"), which covers heat sink devices. Heat sinks are generally used to dissipate the heat generated by computer microprocessors, which would otherwise damage a computer's electronic components.

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<sup>1</sup> Defendants' motion to strike plaintiffs' supplemental brief is DENIED, but the court has considered only the portions of plaintiffs' papers that comply with the court's order permitting supplemental briefing.

<sup>2</sup> Pursuant to Civ. L.R. 7-13, this order may not be cited except as provided by Civ. L. R. 3-4(e).

1 Plaintiffs claim that the heat sinks manufactured and sold by defendants Foxconn  
2 Electronics, Foxconn Technology, and Hon Hai infringe claims 1, 2, and 7-9 of the '098 patent.  
3 It is undisputed that the defendants manufacture and sell at least five models of heat sinks to  
4 IBM in the United States. The five models are known as the '369 heat sink, the '713 heat sink,  
5 the '329 heat sink, the '001 heat sink, and the '003 heat sink (collectively, "the accused  
6 products").

7 In the operative second amended complaint, plaintiffs have asserted a claim for patent  
8 infringement under 35 U.S.C. § 1 et seq. Defendants filed counterclaims against plaintiffs  
9 seeking a declaratory judgment that they do not infringe, and that the patent is neither valid nor  
10 enforceable. Both parties have filed motions for summary judgment. Plaintiffs move for  
11 summary judgment of direct infringement on all asserted claims. Defendants move for  
12 summary judgment on 1) direct infringement; 2) invalidity; and 3) the unavailability of lost profits  
13 damages.

14 Plaintiffs have also moved for summary judgment on three of defendants' affirmative  
15 defenses. Defendants have indicated that they do not oppose the entry of summary judgment  
16 on those three defenses.

## 17 DISCUSSION

### 18 A. Legal Standard

19 Summary judgment is appropriate when the evidence shows there is no genuine issue  
20 of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P.  
21 56(c); Anderson v. Liberty Lobby, Inc., 477 U.S. 242 (1986).

### 22 B. Infringement

#### 23 1. Legal Standard

24 The court engages in a two-step process in evaluating a motion for summary judgment  
25 on infringement. First, the court must determine the scope and meaning of the claims in claim  
26 construction, and then compare that construction of the patent against the accused products.  
27 See, e.g., Business Objects, S.A. v. Microstrategy, Inc., 393 F.3d 1366, 1371 (Fed. Cir. 2004)

(citations omitted).

While claim construction is a matter of law, infringement itself is a question of fact. See, e.g., Frank's Casing Crew and Rental Tools, Inc. v. Weatherford International, Inc., 389 F.3d 1370, 1376 (Fed. Cir. 2004) (citations omitted). Therefore, a plaintiff is only entitled to summary judgment on the question of infringement “only if the facts and inferences, when viewed in the light most favorable to [defendant], would not persuade a reasonable jury to return a verdict in favor of . . . the non-moving party.” Business Objects, 398 F.3d at 1371.

At the hearing, it became apparent that two additional disputed terms were in need of construction. Pursuant to agreement of the parties, additional briefing on claim construction was submitted following the hearing. The court adopts the standard for review set forth in the August 30, 2004 claim construction order in this case, and construes the disputed terms “side wall” and “fixed relative to” as follows.

2. “Side Wall”

a. Claim Construction

Plaintiffs propose that the term “side wall” in the ‘098 patent be construed as “any upright structure that forms the side of something, having a length much greater than its thickness, and that is used for support, enclosure, defining a space, or protecting an area.” Defendants propose the construction “a structure enclosing, dividing, or protecting an area, on the side of the claimed housing.” The parties agree that the term “side wall” should be given its ordinary meaning in construction, and that nothing in the claims, specification, or prosecution history has altered the scope of that term. See, e.g., Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202 (Fed. Cir. 2002), cert. denied, 538 U.S. 1058 (2003) (claim language to be given ordinary meaning absent clear indication to do otherwise).

The court finds that defendants’ proposal more accurately defines the ordinary meaning of the term “wall,” without the added limitation that the wall have a length much greater than its thickness, and construes the term “side wall” as **a structure enclosing, dividing, or protecting an area on the side of the claimed housing.**

b. Infringement Analysis

At the hearing, defendants provided a sample accused product for the court to examine. The accused product consists of a heat sink enclosed within a top wall, a bottom wall, and four pillars of metal at the corners of the unit that connect the top and bottom walls. The four pillars are connected to one another by a small strip of metal attached to the base, but otherwise, the housing is not enclosed on the sides. See Defendants' Opp. to Plaintiffs' Motion for Summary Judgment at 6 (photograph). Plaintiffs claim these pillars of metal form a "side wall," whereas defendants claim they do not.

On the undisputed facts before the court, it is clear that these pillars cannot be considered a "wall" in the ordinary meaning of that term. Since this term appears in all the asserted claims, summary judgment of no direct infringement on all the asserted claims of the '098 patent is GRANTED in favor of defendants, and DENIED as to plaintiffs.<sup>3</sup>

However, plaintiffs are correct that even with a finding of no direct infringement by defendants, their claim for infringement under the doctrine of equivalents remains at issue. For this reason, the court proceeds to discuss the remaining infringement and validity issues.

3. "Fixed Relative to Said Base"

a. Claim Construction

Plaintiffs propose that the term "fixed relative to said base" be construed as "securely placed, fastened, or attached relative to said base or base wall," while defendants propose the construction "set firmly in position or stationary, with regard to the base." The parties agree that the ordinary meaning of the phrase controls, and that nothing in the claims, specification, or prosecution history has modified the meaning of the phrase as it is used in the '098 patent. Texas Digital, 308 F.3d at 1202.

The dispute thus centers on the question of whether the phrase "fixed relative to" requires that the item being fixed be completely immovable or merely securely attached in

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<sup>3</sup> A finding that any one limitation in a patent claim is not met by the accused devices is sufficient to find no direct infringement of that claim.

1 relation to the wall. The ordinary meaning of the term “fixed” does not necessarily imply that  
2 the secured item be completely immovable, but rather, only that it be securely attached.

3 Accordingly, the court finds that plaintiffs’ proposed construction better reflects the  
4 ordinary meaning of the term, except as to whether the object being fixed can be fixed to the  
5 base wall. Nothing in the ordinary meaning of the term permits the object to be fixed to the  
6 base wall. Accordingly, the court construes the term “fixed relative to said base” as “**securely  
7 placed, fastened, or attached relative to said base.**”

8 b. Infringement Analysis

9 The housing unit on the accused devices is fixed to the base by tabs. Plaintiffs argue  
10 that the tabs on defendants’ housing unit securely fix the unit in place and render it stationary  
11 as required by the construction of “fixed relative to said base,” whereas defendants claim that  
12 the tabs permit limited movement between the housing unit and the base and the unit cannot  
13 be found to be fixed firmly in place.

14 Summary judgment is DENIED for both parties on this issue. The question of whether  
15 defendants’ housing unit can be considered “securely placed, fastened, or attached” to the  
16 base wall when it is attached to the base with tabs is a disputed issue of fact.

17 4. Trivial or Insignificant Gap

18 The parties next dispute whether the gap between the fins and the top wall in the  
19 accused products is “trivial or insignificant.” The court found in its claim construction of the  
20 term “extending,” that in the prosecution history, the patent applicant distinguished his  
21 invention from the prior art on the grounds that the prior art in question featured “more than a  
22 trivial or insignificant spacing between the fan from the cooling fins.” Claim Construction  
23 Order at 6; see also Ferrera Decl. Exh. 15 at 6 (prosecution history). Thus, the ‘098 patent  
24 could only cover products featuring a “trivial or insignificant” gap between the fins and the top  
25 wall.

26 Plaintiffs are correct that in the prosecution history, the patent applicant further  
27 distinguished his application from the prior art by noting that the significant gap between the  
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1 fins and the top wall in the prior art had the result of substantially reducing air velocity towards  
2 the fins, whereas the '098 patent application described a system to "provide maximum air flow  
3 along the surfaces of the fins to provide maximum heat transfer from the fins." Ferrera Decl.  
4 Exh. 15 at 6. Thus, any assessment of the triviality or insignificance of the gap must be  
5 assessed in terms of the effect of the gap on air flow or heat transfer.

6 Defendants' expert concedes that the gap present in the accused devices has no effect  
7 on air flow or heat transfer. See Supplemental Maltz Expert Report (conceding that any  
8 improvement seen was within margin of error). Accordingly, the gap in the accused device  
9 must be considered "trivial" or "insignificant" in considering whether the fins "extend" towards  
10 the top wall. Because the accused devices feature a "trivial or insignificant" gap between the  
11 fins and the top wall, they thus read directly onto the requirement that the fins "extend" to the  
12 top wall, and summary judgment on this issue is GRANTED in favor of plaintiffs and DENIED  
13 as to defendants.

#### 14 5. Continuous Length of Material

15 In its papers, defendants raised the argument that it did not infringe the '098 patent  
16 because its fins were not made of a continuous length of material. However, defendants  
17 appear to have subsequently abandoned that argument in the reply and at the hearing.  
18 Summary judgment of non-infringement on this issue in favor of defendants is thus DENIED.

#### 19 6. Other Asserted Devices

20 Finally, defendants move for summary judgment of non-infringement on nineteen other  
21 devices for which they provided discovery to plaintiffs but against which plaintiffs asserted no  
22 contentions. As discussed at the hearing, summary judgment in defendants' favor on those  
23 devices is DENIED, and the court would likely grant any motion to exclude evidence of those  
24 devices if proffered by plaintiffs at trial.

#### 25 C. Invalidity

26 Defendants next move for summary judgment on invalidity, claiming that the '098 patent  
27 is either anticipated or rendered obvious by the prior art. Because an issued patent enjoys  
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1 the presumption of validity, invalidity must be proven by clear and convincing evidence. See,  
2 e.g., Medical Instrumentation and Diagnostics Corp. v. Elekta AB, 344 F.3d 1205, 1220 (Fed.  
3 Cir. 2003), cert. denied, 541 U.S. 959 (2004) (citation omitted).

4 1. Anticipation

5 Defendants argue that claims 1, 2, and 7 of the '098 patent are anticipated by the prior  
6 art references of both Yuan and Lee.

7 a. Legal Standard

8 "To anticipate, a single reference must teach each and every limitation of the claimed  
9 invention." Eolas Technologies, Inc. v. Microsoft Corporation, 399 F.3d 1325, 1335 (Fed. Cir.  
10 2005) (citation omitted). Anticipation is a question of fact, see, e.g., Medical Instrumentation,  
11 344 F.3d at 1220, and summary judgment is thus proper only if "no reasonable jury could find  
12 that the patent is not anticipated," Telemac Cellular Corp. v. Topp Telecomm Inc., 247 F.3d  
13 1316, 1327 (Fed. Cir. 2001).

14 b. Claims 1 and 2

15 Taiwan Patent No. 186944 ("Yuan"), filed in 1992, discloses a heat sink that consists of  
16 a metal base with wedges cut into it. A housing unit with a round aperture is screwed onto the  
17 base, and a fan is screwed into the aperture and the base. Wied Decl. Exh. C ("Yuan  
18 Patent"); id. at Fig 1 (metal base with fins labeled "30"). Plaintiffs appear to concede that  
19 Yuan contains all the elements in claims 1 and 2 of the '098 patent, except for one. Plaintiffs  
20 argue that because the base of the Yuan heat sink is the heat sink itself, it thus cannot be said  
21 to contain a separate flat base, or fins fixed to that flat base. Moffat Opp. Decl. ¶ 11.

22 Plaintiffs' argument is unavailing. The "heat sink" described in the '098 patent does not  
23 exist separately from the base but rather, is comprised of the elements of a) a base with fins  
24 attached to it, b) a housing unit attached to the base, and c) a fan attached to the top wall of  
25 the base. This is exactly what is described by Yuan, which contains a thick metal base with  
26 fins cut into it, a housing unit over the fins, and a fan attached to the top of the base.

27 This entire contained unit constitutes the heat sink as a whole, and thus the thick base  
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1 in Yuan constitutes the flat base required by the '098 patent. This is further supported by the  
2 Yuan specification, which describes the bottom of the base wall as "the bottom surface of the  
3 heat sink." Id. at 2, 6-7; see also Fig. 3 (showing base wall mounted on top of a  
4 microprocessor).

5 Claims 1 and 2 of the '098 patent are thus anticipated by Yuan.

6 c. Claim 7

7 Defendants claim that both Yuan and U.S. Patent No. 5,375,655 ("Lee," issued in  
8 1993) anticipate claim 7 of the '098 patent as well.

9 i. Yuan

10 Claim 7 of the '098 patent requires the disclosure of, among other things, a fan blade  
11 spaced from the fins sufficiently to create a plenum chamber between the base and the fins.  
12 As construed, the term "plenum chamber" as used in the '098 patent requires only that there  
13 be sufficient space between the base and the fins for air to circulate.

14 Disputed issues of fact exist on the question of whether Yuan discloses that amount of  
15 space, with plaintiffs arguing that Yuan shows no space between the fan and the fins for air  
16 circulations and defendants arguing the opposite. Construing all facts in favor of plaintiffs as  
17 the non-moving parties, defendant's motion for summary judgment on the anticipation of claim  
18 7 of the '098 patent by Yuan is DENIED.

19 ii. Lee

20 Lee discloses a heat sink with multiple corrugated fins that are arranged in a  
21 staggered formation and thus offset from one another, creating short channels that do not run  
22 the length of the heat sink.

23 Claim 7 of the '098 patent also requires the presence of a fan assembly fixed to the top  
24 wall of the heat sink. Defendants concede that Lee does not disclose the presence of a fan  
25 assembly, but does describe systems in which air flow can be directed through the heat sink  
26 through "forced fluid flow application." Lee Patent at 5:67-6:3, 8:43-46. There is thus a  
27 genuine disputed issue of material fact concerning whether a person of ordinary skill in the art  
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1 would read the Lee patent and understand that it in fact disclosed a fan assembly through its  
2 discussion of “forced fluid flow application.” Defendant’s motion for summary judgment of  
3 anticipation of claim 7 of the ‘098 patent by Lee is DENIED.

4 2. Obviousness

5 Next, defendants argue that claims 7, 8, and 9 of the ‘098 patent are rendered obvious  
6 by a combination of Yuan, Lee, Tanaka, and the 333100 Disclosure.

7 A patent is considered obvious if “the differences between it and the prior art “are such  
8 that the subject matter as a whole would have been obvious at the time the invention was  
9 made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a). To determine  
10 obviousness, the court must “examine 1) the scope and the content of the prior art; 2) the level  
11 of ordinary skill in the art; 3) the differences between the claimed invention and the prior art;  
12 and 4) the objective evidence of nonobviousness.” Iron Grip Barbell Co., Inc. v. USA Sports,  
13 Inc., 392 F.3d 1317, 1320 (Fed. Cir. 2004), citing Graham v. John Deere Co., 383 U.S. 1, 17-  
14 18 (1966). Obviousness is a question of law based on underlying questions of fact. Medical  
15 Instrumentation, 344 F.3d at 1220 (Fed. Cir. 2003) (citation omitted).

16 To prevail on a claim for obviousness, defendants must show “a motivation or  
17 suggestion” to combine the separate elements of prior art cited, along with “a reasonable  
18 expectation of success” in doing so. Boehringer Ingelheim Vetmedica, Inc. v. Schering-  
19 Plough Corp., 320 F.3d 1339, 1354 (Fed. Cir. 2003). See also Teleflex, Inc. v. Ficosa North  
20 Am. Corp., 299 F.3d 1313, 1334 (Fed. Cir. 2002) (“The showing of motivation to combine  
21 must be clear and particular, and it must be supported by actual evidence.”)

22 Plaintiffs argue, among other things, that defendants have failed to show any motivation  
23 to combine these references to render claims 7-9 obvious. Defendants argue in response  
24 that it is clear from reviewing the references that the issue of air flow was significant and any  
25 practitioner with ordinary skill in the art would have known to add a plenum chamber of some  
26 design to the top of the heat sink. However, this creates at a minimum significant questions of  
27 fact as to the motivation to combine, which is sufficient to defeat summary judgment on  
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1 obviousness for claims 7-9. In re Gartside, 203 F.3d 1305, 1316 (Fed. Cir. 2000) ("The  
2 presence or absence of a motivation to combine references in an obviousness determination  
3 is a pure question of fact."). Defendants' motion for summary judgment on obviousness is  
4 DENIED.

5 D. Lost Profits

6 Defendants next move for summary judgment on the issue of damages, claiming that  
7 plaintiffs are barred from recovering lost profits damages in this matter as a matter of law.

8 To prevail on a request for lost profits, plaintiffs must show the absence of non-  
9 infringing substitutes for its products. Rite-Hite Corp. v. Kelley Co., Inc., 56 F.3d 1538, 1545  
10 (Fed. Cir. 1995), citing Panduit Corp. v. Stahl Brothers Fibre Works, Inc., 575 F.2d 1152,  
11 1156 (6th Cir. 1978). There is a genuine dispute of material fact as to whether IBM would  
12 have accepted alternate designs for heat sinks and whether the witnesses testifying otherwise  
13 are credible. Summary judgment on this issue in favor of defendants is DENIED and  
14 evidence of lost profits damages may be presented at trial.

15 E. Affirmative Defenses

16 Finally, plaintiffs moves for summary judgment on the first, fifth, and thirteenth  
17 affirmative defenses asserted by defendants, which are: failure to state a claim, inequitable  
18 conduct, and failure to mark. Defendants have filed a notice of non-opposition to the request.  
19 Accordingly, plaintiffs' motion for summary judgment on these three affirmative defenses is  
20 GRANTED.

21 F. Conclusion

22 Summary judgment on the issue of direct infringement is GRANTED in favor of  
23 defendants and DENIED for plaintiffs. Defendants thus do not directly infringe the '098 patent  
24 under the court's interpretation of the term "side wall." The issue of infringement under the  
25 doctrine of equivalents remains outstanding for trial. Summary judgment under the court's  
26 construction of "fixed relative to said base" is DENIED as to both parties, but summary  
27 judgment under the court's construction of "extending" is GRANTED in favor of plaintiffs and  
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1 DENIED as to defendants. Summary judgment in favor of defendants on "continuous length of  
2 material" is DENIED, and summary judgment in favor of defendants on other devices for which  
3 plaintiffs asserted no contentions is DENIED.

4 Defendants' motion for summary judgment on the issue of invalidity is GRANTED IN  
5 PART and DENIED IN PART. Summary judgment of invalidity is GRANTED as to claims 1  
6 and 2 of the '098 patent, as anticipated by Yuan, and DENIED as to claims 7-9, because  
7 there are disputed issues of fact on anticipation concerning whether Yuan discloses a plenum  
8 chamber, whether Lee discloses a fan assembly, and also disputed issues of fact as to  
9 whether there was any motivation to combine any of the prior art, as required for obviousness.

10 Defendants' motion for summary judgment on lost profits is DENIED, and plaintiffs'  
11 motion for summary judgment on the three affirmative defenses is GRANTED.

12 This order fully adjudicates the matters listed at nos. 130, 139, 141, 147, 151, 153,  
13 191, and 200 on the clerk's docket for this case.

14 Counsel may arrange to retrieve the exemplars submitted at the hearing for the court's  
15 examination by calling the courtroom deputy for the undersigned.

16 **IT IS SO ORDERED.**

17 Dated: May 20, 2005

  
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PHYLLIS J. HAMILTON  
United States District Judge